recently opened and coal beds worked in Virginia, Tennessee, Alabama, Georgia, etc., at a lower stage than that of the Northern basins, a mass of specimens of fossil plants, not yet known in this country, have been discovered and sent from those localities." Mr. Lesquereux adds he has had to leave a large amount of specimens still unexamined, and he foresees "that there is left unknown, for future research and study of the history of the vegetation of the coal, an amount of materials at least as great and as important as that which has already been published."

Mr. Lesquereux acknowledges in a note the aid he has received in the loan of specimens from Mr. R. D. Lacoe, of Pittston, Pa., "who has directed for years explorations, still continued, in the more interesting localities of the coal-fields of North America. He has thus brought up, at great expense, a collection of fossil plants of divers formations, of insects, crustaceans, etc., which is not only by far the largest and most valuable of any in America, but which certainly may compare in this specialty with the richest collections of any of the European museums."

The other report is marked P.P.P., 1884, and contains two palæontological papers, valuable in themselves and for their illustrations. The first one, by Mr. C. E. Beecher on the Ceratiocaridæ of the Upper Devonian measures, we have already noticed in this journal; the second is a note by Professor James Hall on the Eurypteridæ from the lower coal measures, and it is illustrated by six heliotypes, an excellent way of illustrating these fossils. One new species (*Eurypterus potens*) is described, and the remains of other species fully illustrated.

THE ZOÖLOGICAL RECORD FOR 1883.[1]—That the work in systematic zoölogy throughout the scientific world went on in 1883 much as in former years, is proved by the fact that the size of each of these useful records remains about the same from year to year. The present volume, which contains no references to the Arachnida, is only twenty-eight pages shorter than its predecessor, in which that class occupied thirty-three pages.

The year 1883 was, so far as regards the mammals, chiefly marked by the large number of palæontological books and papers which appeared, among which those of Ameghino, Cope, Filhol, and Lydekker are the most prominent.

While there are no striking novelties in ornithological work, the year is reported to have been remarkable for a large amount of steady work. Little appears to have been done with the reptiles and Amphibia; beyond special papers no works on ichthology of general importance appeared this year.

As usual over half the volume is devoted to the Crustacea and especially the insects. Regarding the former several monographs

[1] *The Zoölogical Record for 1883;* being volume twentieth of the record of zoölogical literature. Edited by E. C. RYE. London, 1884, 8vo.

and lengthy faunal lists, especially works on deep-sea forms have appeared, as well as important anatomical papers. Important papers on the myriopods appeared in 1883, and of entomological literature there appeared important anatomical and morphological as well as palæontological works and papers, besides some faunal works of value. We shall in another place draw attention to recent discoveries which have not been quoted in our entomological notes. It is enough to take one's breath away to be told that the number of new genera described in 1883 was 1079, while the Arachnida have yet to be heard from.

As we have said in former years the Zoölogical Record is of immediate and pressing value to American students, and it is surprising that more copies are not taken by our working natu ralists.

MILLSPAUGH'S AMERICAN MEDICINAL PLANTS.[1]—This is a promising work now issuing in parts, each containing six colored lithographic plates, and from ten to fifteen pages of descriptive text. Upon each plate are shown the characteristic portions of some plant with dissections of the floral organs, or the fruits and seeds. The drawings are generally accurate and the coloring is good. Of course one need not look in a work like this for that degree of accuracy and finish which we are accustomed to see in the drawings by Isaac Sprague, but still they answer their purpose admirably, of enabling the student to identify the different medicinal plants of his flora.

Five parts (composing Fascicle I) of this publication have already appeared, including thirty plates. The whole work will contain 180 plates, and it is the intention of the publishers to complete it within two years. The low price at which it is offered (five dollars per fascicle) places it within reach of everyone who is interested in the medicinal plants of the country. It will also be found an interesting and valuable addition to the library of the botanist.—*Charles E. Bessey.*

PHILOSOPHIC ZOÖLOGY BEFORE DARWIN.[2]—"The evolution of ideas," says the author in his preface, is much like that of "living beings." They ordinarily arise in an humble way, and lie concealed among older ideas, become confounded with them, but slowly they become differentiated, attain a certain strength, transform and die, after having engendered other ideas of a similar kind." The book is an extremely interesting and suggestive one as will be seen by the following titles of the chapters: first ideas on the place of animals in nature; Aristotle; the Roman period;

[1] *American Medicinal Plants;* an illustrated and descriptive guide to the American plants used as homœopathic remedies; their history, preparation, chemistry and physiological effects. By CHARLES F. MILLSPAUGH, M.D. Illustrated by the author. Boericke & Tafel, New York and Philadelphia.

[2] *La Philosophie Zoölogique avant Darwin.* Par EDMOND PERRIER. Bibliothèque scientifique internationale. XLV. Paris, 1884. 8vo, pp. 292.